

ABSTRACT:

An improved anode element for a plasma generator is comprised of an anode body having a central bore therein. A plurality of arc attachment regions are formed along a surface of the central bore. Each attachment is configured to provide a substantially radially predefined attachment point for an electrical arc extending between the attachment region and a respective cathode when the anode element is used in a plasma generator. The arc attachment points can be areas along the central bore which are elevated or proud relative to adjacent areas. The attachment points can also be defined at least in part by asymmetrical cooling of the anode.